

**Serial No. 09/909,487**  
**Amendment dated August 25, 2005**  
**Reply to Official Action of February 25, 2005**

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1. (currently amended) A steel processing material for addition into a heat of steel in a steel making an electric arc furnace comprising:

(a) from about 5% to about 30% of a dried post combustion material (PCM) recycled from the drop out box of the exhaust of the steel making an electric arc furnace; and

(b) from about 70% to about 95% of a slag foaming material;  
~~wherein the dried post combustion material is sorted prior to being added to the steel making furnace.~~

Claim 2. (original) The steel processing material of claim 1 wherein the slag foaming material comprises about 90% coal and about 10% dolomitic stone.

Claim 3. (canceled)

Claim 4. (currently amended) The steel processing material of claim 1 wherein the dried PCM post combustion material comprises less than about 2% water.

Claim 5. (currently amended) The steel processing material of claim 1 wherein the dried PCM post combustion material is of an injectable particle size, ~~has~~ having an average particle size sufficiently small to allow injection of the PCM post combustion material into the heat of steel.

Claim 6. (currently amended) The steel processing material of claim 1 wherein the

dried PCM post combustion material has maximum particle not greater than about 5/16 of an inch.

Claim 7. (currently amended) The steel processing material of claim 1 wherein the dried PCM post combustion material comprises about 30% to about 55% Fe.

Claims 8-25. (canceled)

Claim 26. (currently amended) A steel processing material, at least partially recycled from an electric arc furnace, comprising:

(a) an iron bearing a post combustion material having less than 2% moisture by weight and recycled from the drop out box of the an electric arc furnace; and

(b) a slag foaming material,

wherein the steel processing material contributes to the foaming of slag when added to a heat of steel in the an electric arc furnace and reacts with the heat to recover iron from the iron bearing post combustion material to the heat, further wherein less than about 1% by weight of the total iron in the heat being recovered is iron.

Claims 27-29. (canceled)

Claim 30. (currently amended) A steel processing material for addition into a heat of steel in an electric arc furnace comprising:

(a) from about 5% to about 30% of a dried post combustion material (PCM) recycled from the drop out box of the exhaust of an electric arc furnace, and

(b) from about 70% to about 95% of a slag forming material;

wherein the dried post combustion material is sorted prior to being added to the electric arc furnace and, wherein the recovery of iron from the steel processing material is only a portion

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of the iron in the heat.

Claims 31-32. (canceled)